

Having thus described the invention, what is claimed is:

1. An electrical connector comprising:
 - 5 an insulative housing defining an opening for receiving a mating element;
at least one terminal accommodated in said housing, said terminal having a
contact portion exposed for mating through said opening with said mating
element; and
a cover slidably retained by said housing, wherein said cover covers said
10 contact portion at said opening when located at a first position, said cover being
movable relative to said housing to a second position to expose said contact
portion for electrical contact with said mating element.
2. The electrical connector as recited in claim 1, further comprising a
15 spring retained by said housing, said spring biasing said cover toward said first
position.
3. The electrical connector as recited in claim 2, wherein said housing is
adapted to receive said mating element along a connection axis and said cover
20 being movable along a sliding axis, said sliding axis being in nonparallel
relation to said connection axis.
4. The electrical connector of claim 3, further comprising a female
alignment member comprising a socket for receiving a male alignment member.

5. The electrical connector of claim 4, wherein said female alignment member further includes a passageway extending between said socket and a passageway opening, said passageway opening being defined by a chamfered rim to receive said male alignment member and facilitate alignment of a misaligned male alignment member during mating.

6. The electrical connector of claim 2, wherein said cover has a forward end facing a direction of movement from said second position toward said first position, said cover including an inclined surface portion on a first side which faces away from said cavity opening, said inclined surface portion sloping toward a second side opposite said first side and toward said forward end.

7. The electrical connector of claim 6, wherein said inclined surface portion extends to said forward end of said cover.

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8. The electrical connector as recited in claim 2, wherein said housing defines an outer periphery, said cover being movable entirely within said outer periphery.

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9. An electrical connector comprising:
a first connector member comprising an insulative first housing adapted to receive at least one conductive first terminal; and

a second connector member comprising an insulative second housing defining a cavity having a cavity opening adapted to receive said first terminal, said second housing adapted to receive at least one conductive second terminal, said second terminal having a contact portion exposed in said cavity for
5 electrically contacting said first terminal, said second connector member further comprising a cover slidably retained by said second housing, said cover covering said contact portion at said cavity opening when located at a first position, said cover having a surface exposed for mating whereby upon an insertion movement of said first connector member with respect to said second
10 connector member said first connector member moves said cover toward a second position exposing said cavity opening for said first terminal to enter said cavity and electrically contact said second terminal.

10. The electrical connector as recited in claim 9, wherein said insertion
15 movement extends along a connection axis, said cover being movable along a path in nonparallel relation to said connection axis.

11. The electrical connector as recited in claim 9, wherein said second
housing defines an outer periphery, said cover being movable entirely within
20 said outer periphery.

12. The electrical connector as recited in claim 9, wherein said second
connector member further comprises a spring biasing said cover toward said
first position.

13. The electrical connector as recited in claim 12 further comprising:

a flexible mounting bracket attached to one of said first and second
connector members such that said one of said first and second connector
5 members is free to move in both an X and a Y direction which extend
orthogonally with respect to said connection axis, said first connector member
further comprising a male alignment member, said second connector member
further comprising a female alignment member, wherein during said insertion
movement said male and female alignment members cooperate with each other
10 such that one of said first and second connector members is free to move in an
X and a Y direction into alignment with the other of said first and second
connector members.

14. The electrical connector as recited in claim 13, wherein said male
15 alignment member comprises a projection and said female alignment member
comprises a passageway, said passageway extending to a passageway opening
for receiving said projection, said passageway opening being defined by a
chamfered rim to facilitate alignment of a misaligned male alignment member
during mating.

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15. The electrical connector as recited in claim 13, wherein said cover has
a forward end facing a direction of movement from said second position toward
said first position, said cover including an inclined surface portion on a first side
which faces away from said cavity opening, said inclined surface portion

sloping toward a second side opposite said first side and toward said forward end, and wherein during said mating movement said male alignment member abuts said inclined surface portion thereby causing said cover to move from said first position toward said second position.

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16. An electrical connector comprising:

a first connector member comprising an insulative first housing, at least one conductive first terminal being mounted in said first housing; and

a second connector member comprising an insulative second housing which
10 defines an opening adapted to receive said first terminal, at least one conductive second terminal being mounted in said second housing, said second terminal having a contact portion exposed in said opening for electrically contacting said first terminal, said second connector member further comprising a cover
slidably secured to said second housing, said cover generally covering said
15 opening when located at a first position, said cover being movable to a second position to expose said contact portion for electrical contact with said first terminal.

17. The electrical connector as recited in claim 16, wherein said second
20 connector member further comprises a spring retained by said housing, said spring biasing said cover toward said first position.

18. The electrical connector as recited in claim 17, wherein said first connector mates with said second connector along a connection axis, said cover

being movable along a path extending generally perpendicular in relation to said connection axis.

19. The electrical connector as recited in claim 18, wherein said first
5 connector member further comprises a male alignment member, and wherein
said second connector member further comprises a female alignment member,
wherein during a mating movement of said first connector member with respect
to said second connector member said male and female alignment members
cooperate with each other to bring said first and second connector members into
10 alignment.

20. The electrical connector as recited in claim 19, wherein said cover has
a forward end facing a direction of movement from said second position toward
said first position, said cover including an inclined surface portion on a first side
15 which faces away from said opening, said inclined surface portion sloping
toward a second side opposite said first side and toward said forward end,
wherein during said mating movement said first connector member abuts said
inclined surface portion to move said cover toward said second position.

20 21. The electrical connector as recited in claim 16, wherein said second
housing defines an outer periphery, said cover being movable entirely within
said outer periphery.

22. The electrical connector as recited in claim 16 further comprising:

a flexible mounting member attached to one of said first and second connector members such that said one of said first and second connector members is free to move in both an X and a Y direction, wherein said first connector member further comprises a male alignment member, and wherein
5 said second connector member further comprises a female alignment member, whereby during a mating movement of said first connector member with respect to said second connector member said male and female alignment members cooperate with each other such that one of said first and second connector members is free to move in an X and a Y direction into alignment with the other
10 of said first and second connector members.